

X12N ELEMENTS IMPORTANT TO DISCHARGE DATA

DATA ELEMENT:

External Cause of Injury Coding Standards

RECOMMENDATION:

NAHDO recommends expanding the required primary diagnosis fields in the X12N HI Diagnosis segment to accommodate two additional diagnosis fields: Place of Injury and Adverse Effect of Medical Care.

Diagnosis coding is as follows in the current X12N Implementation Guide:

Primary Diagnosis segment:

HI 01, required: principal diagnosis

HI 02, required: admitting diagnosis

HI 03, situational: primary External Cause of Injury code

Proposed: Expand required coding to accommodate two additional primary diagnosis fields:

HI 04, situational: if 03 is used then 04 must have the Place of Injury E-codes (ICD-9 code set)

HI 05—situational—for Adverse Medical Event reporting if a state/jurisdiction requires such reporting for codes E 870-E879 or E 930-E949.9

NAHDO forwards this proposal for systematic data collection in statewide hospital discharge data reporting to the Public Health Consortium for discussion and consideration.

CURRENT PRACTICE

The capture of the external cause of injury coding in statewide discharge data systems varies across states. Thirty-eight out of 42 states responding to the Healthcare Cost and Utilization Project (HCUP) 1998 Data Inventory for HCUP Partners reported that they collect External Cause of Injury Codes as a part of their inpatient data systems, but that the number of E-codes collected ranged from one to “all” E-codes. The capture of secondary E-codes may be a function of the number of total diagnosis codes collected by that state (which ranges from 9 to 24 total diagnosis codes).

Despite the lack of a standard coding convention, states are using the E-code to measure the burden of injury and target interventions. One state provided the following example of the opportunities and challenges in using E-codes for analyzing discharge data. In this state’s 1997 Emergency Department administrative database, the frequency with which the first listed E-code was the Place-of-Injury code is presented:

COUNTS OF EMERGENCY DEPARTMENT ADMISSIONS FOR ALL INJURIES (1997)

PRINCIPAL E-CODE	Frequency	Percent
849-849.9		
E849	28	1.1
Home	318	12.5
Farm	4	.2
Mine and quarry	6	.2
Industrial place and premises	1611	63.5
Place for recreation and sport	89	3.5
Street and Highway	85	3
Public Building	32	1.3
Residential Institution	22	.9
Other Places	54	2.1
Unspecified Place	297	11.7

This means that E-codes noting the cause of injury were not a primary E-code. To overcome the challenges in analyzing E-coded data for injury, this state reports that, for ICD-9 injury codes (800-999), if the E-code field does not contain a Cause-of-Injury E-code, they then use the first listed E-code found in the diagnosis fields.

AS A CORE DATA ELEMENT: PROS AND CONS

The National Committee on Vital and Health Statistics (NCVHS) recommends the inclusion of the principal External Cause of Injury code in the Uniform Hospital Discharge Data Set; the Uniform Ambulatory Care Data Set and as included in the HCFA UB-92. NCVHS defines the External Cause of Injury as the ICD-9-CM code for the external cause of an injury, poisoning, or adverse effect and defines the priorities:

1. Principal diagnosis of an injury or poisoning
2. Other diagnosis of an injury, poisoning, or adverse effect directly related to the principal diagnosis
3. Other diagnosis with an external cause

Justification for standardizing the collection of E-codes:

External cause of injury coding provides a framework for systematically collecting population-based information on occurrence, outcomes, and costs of medical treatment. Primary E-code, linked to occurrence code, is important for injury surveillance, domestic violence, workplace injury, and other prevention and public health programs.

Injuries and poisonings account for a significant number of inpatient and Emergency Department encounters each year. Healthy People 2010 Objectives target reducing the

rates in preventable injuries caused by motor vehicle accidents, falls, firearms-related deaths and injuries, and other intentional and unintentional injuries. Examples include:

- Reduction in workplace injuries and deaths: Work-related injuries and illnesses place an enormous burden on U.S. workers and the economy, costing \$121 billion in medical care, lost productivity, and wages (NCHS, 1997).
- Reduction in suicides and suicide attempts: The U.S. Surgeon General recognized suicide as a major health problem and has recommended a comprehensive national strategy to prevent suicides (HP 2010)

Understanding the incidence, causes, and patterns of intentional and unintentional injury is important to public health, prevention of domestic violence, research, employer productivity, and community planning. Surveillance data systems provide an important source of community and national utilization, cost, and outcomes data.

Adverse medical events

A recent report from the Institute of Medicine (IOM) of the National Academy of Sciences established a comprehensive strategy for government, industry, consumers and health providers to reduce medical errors. The Quality Interagency Coordination Task Force (QuIC), in its February 2000 report to the President, voices support for the development of state-based systems on preventable, adverse events with public disclosure components that prevent the information from being used as a tool for punitive action by State and local authorities. The QuIC supports an adverse event mandatory reporting systems in all 50 states in 3 years. Use of existing codes and data collection mechanisms will facilitate state-level reporting. Requiring adverse event diagnosis codes (E 870-E879 or E 930-E 949.9) to be reported in the X12N HI diagnosis segment provides a systematic and available mechanism for medical errors reporting.

States are beginning to more closely analyze their existing data sources for clues about adverse medical events and to guide planning for strategies to address this issue. One state shared with NAHDO preliminary statistics from their Emergency Department database. In this state's 1997 Emergency Department data base, almost 30 percent of records contained an adverse event code (in the range of E 870-879 or E930-E949.9):

E-code in any ICD-9 field	23.6 percent
E-code in E-code field only	19.7 percent

An example of a state's preliminary analysis is included below showing the relatively consistent percentage of adverse event codes present in inpatient hospital discharge data reporting over 7 years.

Year Inpatient Data Collection	Percent Adverse Events (E870-879 and E930- 949.9)
1992	2.78
1993	2.77
1994	3.23
1995	4.45
1996	4.93
1997	6.03
1998	4.96

These findings were consistent with another state's analysis of the incidence of multiple year adverse effects in inpatient discharge data. Defining a coding protocol to capture adverse event codes provides only limited information about this important issue; it may be useful as a screening tool, if the proper disclosure protections are in place.

Concerns:

External Cause of Injury and Place of Injury coding standards are well defined and generally accepted by the public health and provider community and little resistance is anticipated.

Adverse medical event coding, while defined in standards, is in practice a very sensitive issue. Questions about the validity of the incidence of these events have been raised, with the presumption that these events are under-reported. The collection and use of these data will be a major public policy issue over the next few years.

RECOMMENDED STEPS TOWARD IMPLEMENTATION

The Public Health Consortium will review this issue and recommendations for further action will be discussed.

NAHDO recommends that data validation protocols accompany any reporting policies for adverse medical events.

DATA ELEMENT:

Payer Type

RECOMMENDATION:

NAHDO recommends a standard for reporting the type of first, second, and third payer:

Elements in the current version of the 837 x12N Implementation Guide:

09 Self-pay
10 Central Certification
11 Other Non-Federal Programs
12 Preferred Provider Organization (PPO)
13 Point of Service (POS)
14 Exclusive Provider Organization (EPO)
15 Indemnity Insurance
16 Health Maintenance Organization (HMO) Medicare Risk
AM Automobile Medical
BL Blue Cross/Blue Shield
CH Champus
CI Commercial Insurance Co.
DS Disability
HM Health Maintenance Organization
LI Liability
LM Liability Medical
MB Medicare Part B
MC Medicaid
OF Other Federal Program
TV Title V
VA Veteran Administration Plan
WC Workers' Compensation Health Claim
ZZ Mutually Defined

CURRENT PRACTICE

Coding of payer type varies across states. While most states with discharge data reporting systems collect payer fields, how they group these differs:

- Coding from free text by the health data agency
- Coding by the provider from a list of payer categories defined by the health data agency.

One state defines these payer type categories:

00= Self Pay
01= Commercial Indemnity
02= HMO
03= PPO
04= State Employees Managed Care Plan
05= Medicare
06= Medicaid Managed Care Plan

- 07= CHAMPUS
- 08= Children's Rehabilitation Services
- 09= Workers Compensation
- 10= Indian Health Services
- 11= Medicare Risk
- 12= Charity
- 13= Foreign National
- 14= Other

Another state, in the same year of reporting requirements, requires the following breakouts:

Alpha name of payer plus:

- 01= Medicare
- 02= Medicaid
- 03= Title V
- 04= Other Government
- 05= Workers Comp
- 06= Blue Cross
- 07= Other commercial insurance
- 08= Self pay
- 09= Others
- 00= Invalid / Missing

The National Committee on Vital and Health Statistics (NCVHS) recommends that the name of each source of payment should be provided as free text for primary and secondary payers, but this information provides little information about the type of payer or plan in which the patient is covered. For instance, is Blue Cross Blue Shield a commercial indemnity plan? A HMO product the company administers?

States use this field in discharge data sets to understand the effects of insurance status on utilization, outcomes, access, and cost. Many states evaluate preventable or avoidable hospitalizations and discover that inpatient utilization for conditions such as asthma, diabetic complications, and hypertension vary according to several factors, including primary payer. High rates of hospitalization for conditions that can be effectively managed in outpatient settings may indicate poor access to outpatient health care and identifying populations where this access is inadequate can promote accountability and highlight areas for community intervention and improvement. Comparing inpatient outcomes by payer type provides useful information to policy makers, purchasers, and consumers on health plan performance.

AS A CORE DATA ELEMENT: PROS AND CONS

Justification for standardizing the collection of Standard Payer Type Codes:

Better understanding about the role that payer type plays in determining health utilization and health outcomes will require a more consistent and complete approach to data collection in surveillance and statewide data systems.

As healthcare comparisons at the regional and national level become available, a consistent standard for coding across states and providers is increasingly important. Providers are in the best position to know the estimated source of payment during the hospitalization.

Concerns:

Plan types are evolving with the market and identifying relevant new plans and plan structures will always be a challenge. Providers may not truly know the actual payer until well after the discharge date of the patient, so the accuracy of the coding may be in question.

RECOMMENDED STEPS TOWARD IMPLEMENTATION

The X12N standard already exists in the current implementation guide. The Public Health Consortium and state data agencies will be asked to evaluate the adequacy of these categories to public health and research applications. Suggestions for revising categories will be forwarded to the X12N Workgroups and appropriate content committees. Educating state health data organizations about these standard categories and promoting the adoption of these (or other) standard payer breakouts will improve payer analyses locally and nationally.

DATA ELEMENT:

Present on Admission Indicator (POA)

RECOMMENDATION:

NAHDO recommends the education of state health data agencies about the availability of this data element in the X12N Implementation Guide as well as further studies on the value of this data element to public health and research. This will be key in assuring its retention in future X12N Implementation Guides.

X12N Implementation Guide:

Situational: C022-09 would only need to be reported to data collectors requiring this information when C022-01 is “BF” (Diagnosis Code) and range of diagnosis codes were NOT given in C022-08.

09 C022-09 is used to identify the diagnosis onset as it relates to the diagnosis reported in C022-02.

Y= onset occurred prior to admission to the hospital;

N=onset did NOT occur prior to admission to the hospital

U=unknown whether the onset occurred prior to admission to the hospital or not

CURRENT PRACTICE

In 1999, NAHDO conducted an inventory of state data collection practices for the Healthcare Cost and Utilization Project (HCUP), funded by the Agency for Healthcare Research and Quality (AHRQ). Two out of 42 states collecting inpatient discharge data reported they collect POA as a part of their discharge data reporting requirements.

AS A CORE DATA ELEMENT: PROS AND CONS

Justification for collection:

One of the core fields recommended by the National Committee for Vital and Health Statistics (NCVHS) for inclusion in the Uniform Hospital Discharge Data Set, this field is used to distinguish between admitting diagnoses (conditions present on admission) versus those that manifested during the hospital stay.

California uses this field to monitor adverse events linked to staffing ratios (survey). Quality improvement and outcomes studies can differentiate hospital-acquired diagnoses from those existing at the time of admission.

Concerns:

In the two states collecting this field, providers supported its collection and resistance was limited.

Present on Admission Indicator

RECOMMENDED STEPS TOWARD IMPLEMENTATION

NAHDO recommends:

- Assurance that this field is retained in the next Implementation Guide and that the Public Health Consortium monitor its status
- Education of discharge data agencies as to the inclusion of this field in the current X12N implementation guide, the value of the field to outcomes studies, and technical support to enable its collection where needed.

Present on Admission Indicator

DATA ELEMENT:

Birthweight of Newborn on the Newborn Record

RECOMMENDATION:

X12N Implementation Guide Standard includes a birthweight standard in the Patient segment:

PAT 07: Qualifier, grams

PAT 08: Weight, required for delivery services

NAHDO recommends education of state data agencies that this standard exists in the X12N Implementation Guide.

CURRENT PRACTICE

Fifteen out of forty two states that responded to an HCUP Partner inventory (1999) reported collecting birth weight with the newborn record. This data element provides important information about birth outcomes, including low and very low birthweight deliveries.

AS A CORE DATA ELEMENT: PROS AND CONS

Justification

Over a third of the states already collect this element. This data element is important to maternal and child health (Title V performance measures tied to federal funding) and the Agency for Health Care Research and Quality's new national database specific to children (0-18 years).

Collection with discharge record may be preferable to linkage. Newborns often do not have a unique identifier (such as social security number), making the linkage between the discharge record and the newborn record difficult.

Concerns

Redundant reporting by providers who report this field on Birth Certificates.

RECOMMENDED STEPS TOWARD IMPLEMENTATION

Encourage states to collect and use this data element as a part of their discharge data reporting system and continue to document the utility of this element to maternal child health issues.

DATA ELEMENT:

Gestational Age of Newborn on the Newborn Record

RECOMMENDATION:

NAHDO invites Consortium discussion about including Gestational Age as a core data element in hospital discharge data reporting. Does the value justify the cost to report? Are there alternatives and what are these?

CURRENT PRACTICE

One state reports that they collect the Gestational Age on the newborn discharge data record (out of 42 responding to the HCUP Partner Inventory, 1999). This state uses the data for birth outcomes and maternal child health evaluations.

AS A CORE DATA ELEMENT: PROS AND CONS

This data element is important to maternal and child health (Title V performance measures tied to federal funding) and the Agency for Health Care Research and Quality's new national database specific to children (0-18 years).

Collection with discharge record may be preferable to linkage. Newborns often do not have a unique identifier (such as social security number), making the linkage between the discharge record and the newborn record difficult.

Justification

May be an important data element for maternal and child research.

Concern

Redundant reporting by providers who report this field on Birth Certificates.

RECOMMENDED STEPS TOWARD IMPLEMENTATION

Open to further discussion

DATA ELEMENT:

Race and Ethnicity

This document presents a summary of NAHDO's recommendations for the consideration of Race and Ethnicity into the 837 X12N Health Care Claim Institutional Guide.

These recommendations are based on NAHDO's research and consultation with experts in state health data and public health research, review of the current state practices regarding race and ethnicity data, careful consideration of the issues for collection of race and ethnicity data, and examination of the need for standards in race and ethnicity data for public health surveillance and research. Such standards will facilitate collaboration by federal, state, and local organizations in the collection, analysis, and reporting of population and health statistics and consequently strengthen public health surveillance of racial and ethnic populations in the United States.

RECOMMENDATION:

As presented to the X12N TG2 WG2:

For inclusion into the fifth element in the DMG or the Demographic Segment of the X12N Implementation Guide 4030 for the Institutional 837 claims, two new coding entries were added to the existing X12 code source to accommodate expanded racial and ethnic codes (Classification of Race or Ethnicity) with additional detail to indicate the method of collection (self-report versus observer identification).

Workgroup Request:

Change DMG05 usage from "not used" to "situational" with the three composite elements as follows:

DMG05-1: Race/Ethnicity Code, 1109, situational

DMG05-2 Qualifier Code, 1270, situational

DMG05-3 Industry Code, 1271, situational

Make DMG10 usage "situational. Add a data element note that refers to the code source, the same code source as REC references

Make DMG11 usage "situational", Collection method code.

DMG05: Condition Statement:

Used when reporting patient race or ethnicity with health care claim or encounter data is required by State or Federal law or regulation or when reporting this data on a voluntary basis is permitted by State and Federal law or regulation.

Workgroup Result:

The end result after discussion was to leave the particular usage for DMG05-1 as "not used."

OMB Standards on Race and Ethnicity: Summary

The Office of Management (OMB) promulgated new Race and Ethnicity standards on October 30, 1997 (now referred to as “Standards for the Classification of Federal Data on Race and Ethnicity”). These new standards, previously known as OMB Directive 15, “Race and Administrative Reporting,” allow a person to designate more than one race, and outline principles for the categorization of race and ethnicity in federal statistics. The purpose of the new Standards, as well as of the earlier OMB Directive 15, is to standardize publication of racial and ethnic data among federal agencies and, as required by legislation in 1976, to increase available information on persons of Hispanic origin.

The Standards were not developed to define the concept of race or ethnicity. Instead, OMB and the agencies of the Executive Branch whose data collection the standards regulate (e.g., CDC and Bureau of the Census) explicitly note the absence of scientific considerations in the designation of categories of race and ethnicity:

OMB STANDARDS Codes set consists of two tables:

5 races:

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White

Ethnicity:

- Hispanic or Latino
- Not Hispanic or Latino Race

These classifications should not be interpreted as being scientific or anthropological in nature, nor should they be viewed as determinants of eligibility for participation in any federal program. They have been developed in response to needs expressed by both the executive branch and Congress to provide for the collection and use of compatible exchangeable racial and ethnic data by Federal agencies.

The OMB Standards present brief rules for classification of persons into racial or ethnic categories, using four defining features: a) descent from "the original specified region, b) a specific cultural origin, c) cultural identification or affiliation, and d) race. For example, "American Indian having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliations or community recognition," while "black" is defined as "a person having origins in any of the black racial groups of Africa.

The validity of health statistics for racial /minority groups is based on four assumptions: 1) the categories of race and ethnicity and specific racial and ethnic group designations are consistently defined and ascertained; 2) the categories and designations are understood by the populations questioned; 3) survey enumeration, participation, and response rates are high and similar for all populations; and 4) the responses of persons are consistent in different times (10). Evidence suggests, however, that these assumptions frequently are not met-particularly for the American Indian, Asian/Pacific Islander, and Hispanic populations (10-12). The cultural diversity and rapid changes in demographics pose further challenges for the surveillance of health status in the United States.

COLLECTION OF RACE AND ETHNICITY IN DISCHARGE DATA SYSTEMS

State Discharge Data Systems

States with hospital discharge data systems vary widely in the collection and use of Race and Ethnicity data. Approximately 85 percent of the states responding to the 1999 inventory reported using a Uniform Bill for Hospitals (UB92) format for collecting discharge data. Race and ethnicity are not included in the UB92 core billing standards as this field is not necessary to pay a claim. Despite its exclusion in the UB92 standards, twenty-seven states (55%) collected data on patient race and ethnicity as a part of their inpatient data using state fields. States find that the inclusion of race and ethnicity into their discharge data reporting requirements enhances the utility of the data they collect. These fields have the potential to provide important patient demographic data for analyzing variance in utilization, access, cost, and quality measures.

As valuable as these fields are to public health and research communities, the present practice of collecting race and ethnicity, and the sensitivities surrounding the collection of these variables at the point of care, result in its uneven collection and under-use.

Because there has been no national standard in the core UB92 data set, states vary in their collection methodologies and definitions of race and ethnicity data. Agencies responsible for maintaining the discharge data systems may or may not require the submission of race/ethnicity and design the edit protocols accordingly. States do not use a standard definition for race and ethnicity (1995 Source Data Values, HCUP).

Concerns in the provider and research communities about the accuracy and completeness of these fields have limited its use in states (e.g. Maine, New Mexico and Utah). Besides variance in definitions, how the data are collected (self-reported by patient or coded by the admitting clerk based on observation of patient characteristics) contribute to the limitations in its analytic utility.

Compliance means that the data suppliers report race/ethnicity data to the state agency maintaining the discharge data system. States may mandate the reporting of discharge data, but not require race/ethnicity to be a part of the record or may not edit the field.

States that require the reporting of race/ethnicity as a part of the discharge data submission show higher rates of compliance than states that collect the data voluntarily or do not require resubmission of the data if it is missing or invalid (96 percent compliance for mandated reporting versus 83 percent compliance for voluntary submission of this field).

TABLE 1: Compliance rates by collection directive

<u>Mandatory collection of race/ethnicity data</u>				<u>Voluntary collection of race/ethnicity data</u>			
		% missing	% compliance		% missing	% compliance	
Range	Average	3.2%	96.8%	Range	Average	17.07%	82.9%
	Minimum	.076%	92.6%		Minimum	0.00%	23.4%
	maximum	7.45%	99.9%		Maximum	76%	100%

Data Sources*1998 Data Inventory for HCUP Partners (1999 collection)**1997 HCUP statistics*

Telephone interviews with states, January 2000

States were contacted about their methodology for collecting this field and several “best practice” states were identified: Wisconsin, California, New York, and New Jersey. These states require the reporting of this field for all patients, require data supplier resubmission for invalid or missing values, and are most likely to use the data for public health and research purposes.

States with low compliance to race/ethnicity reporting are likely to not enforce its collection from providers or obtain the field “incidentally” (providers include this field without specific reporting requirements). These states are likely to report that they have never released or used the data because they did not trust its quality or completeness.

National Hospital Discharge Survey

Nationally, a discharge data system is comprised of data from the National Hospital Discharge Survey (NHDS) conducted by the National Center for Health Statistics. The National Hospital Discharge Survey provides information annually on the inpatient use of hospitals in the United States. Data are collected on diagnoses, surgical and non-surgical procedures, and patient characteristics from a national sample of approximately 500 non-Federal, short-stay hospitals or approximately 8% of the universe. The information is abstracted from a sample of medical records from each sample hospital for a total sample of about 270,000 records each year. The record unit in the database is a hospital discharge. Medical information is coded according to the International Classification of Diseases, 9th Revision, Clinical Modification. Race and ethnicity are coded in the NHDS according to Directive 15. Race is not stated in approximately 20% of the records; ethnicity is not stated in 75% of the records and is not on public use tapes.

ANSI ASC X12N 837

ANSI ASC X12N 837 (abbreviated as X12N) is a set of standards for a wide range of data related to medical claims and encounters, intended to be transmitted electronically. The Federal Health Insurance Portability and Accountability Act (HIPAA) of 1996 requires hospitals and payers to collect a specific set of core data elements, and DHHS recommended adopting X12N as the standard for electronic transactions. The X12N includes a standard definition for race and ethnicity, but the definition differs from the OMB Standards and many state definitions. Additionally, race and ethnicity are designated as “not used” in the X12N Implementation Guide for the claim/encounter (837).

USES OF RACE/ETHNICITY FOR PUBLIC HEALTH SURVEILLANCE

The collection of race and ethnicity information has been an important component of public health surveillance efforts used to identify differences in health status among racial/ethnic minorities. Sources for surveillance information regarding the health status of the total U.S population and racial /ethnic groups include state agencies and multiple federal agencies such as CDC, Bureau of the Census, the National Cancer Institute (NCI), the Indian Health Service (IHS), and the Immigration and Naturalization Service (INS). Categories and types of information collected include births, deaths, population size and migration, disease and injury morbidity, health behavior and attitudes and health service utilization. Such information may serve administrative, management, legal, research and evaluation, and archival purposes.

Although information is collected by separate agencies, published health statistics are frequently based on data from several sources. Data combined in three interrelated ways: a) counts from one source may be used in the estimation of counts in another source (e.g., birth, death, and immigration records to estimate postcensal populations); b) counts from one source may be used in evaluation of counts in another source (e.g., natality records to evaluate the completeness of census counts); and c) counts from separate sources may be used in the estimation of combined statistics (e.g., rates and ratios).

Through its Healthy People 2000 Objectives, the U.S. Public Health Services has developed a set of indicators of population health status. Healthy People 2000 and Health People 2010 include measures of mortality, disease incidence, low birth weight, prenatal care outcomes, childhood poverty, and air quality standards. Objectives highlight the narrowing of racial disparities in health as a major goal of the nation.

Health status differs according to characteristics such as race, gender, and socioeconomic status, (NCHS 1995) and the differences are substantial. Although, the nation's mortality rate is down, there is a mixed picture of progress for racial and ethnic population groups. Significant health disparities between these groups and the white population continue to exist (11). For instance, the infant death rate among African Americans is still more than double that of whites. American Indians and Alaska Natives have an infant death rate almost double that of whites. Hispanics living in the United States are almost twice as likely to die from diabetes than are non-Hispanic whites. On average, Asian and Pacific Islanders have indicators of being one of the healthiest population groups in the United States, however, there are significant health disparities within this diverse group. (<http://www.health.gov/healthypeople>).

Race/Ethnicity Data Collection Concerns

Some of the concerns about collecting these data elements with discharge data include:

- This is considered by some to be a sensitive data element and collecting this from patients at the point of service raise perceptions of opportunity for discrimination;
- Definitions are not clear, including the issue of multiple-race classification;
- States collecting these data elements voluntarily or in a different format may have to make adjustments to their systems.

Race and Ethnicity

States who have had the most extensive experience with collecting race/ethnicity data are the same ones with demonstrated success in using it. If their classification is different from the OMB standard and if they have to change to comply, then there may be a loss of trend data if state-specific breakouts of race are lost.

RECOMMENDED STEPS TOWARDS IMPLEMENTATION:

Although HHS was successful in obtaining X12N Workgroup 2 approval for including race and ethnicity into the next Institutional Implementation Guide (version 4030), the retention of these fields in future Implementation Guides is not guaranteed. NAHDO recommends that the research and public health community continue to document the value of race and ethnicity data to discharge data systems and support its inclusion in future Implementation Guides. Additionally, NAHDO recommends educational and technical assistance to state agencies to adopt these race and ethnicity standards into statewide reporting requirements.

**PRIORITY DATA ELEMENTS FOR INCLUSION
INTO 837 CORE DATA STANDARDS**

DATA ELEMENT:

Do Not Resuscitate

RECOMMENDATION:

NAHDO invites discussion as to the value of Do Not Resuscitate as a core field for discharge data reporting.

CURRENT PRACTICE

In 1999, NAHDO conducted an inventory of state data collection practices for the Health Care Utilization Project (HCUP), funded by the Agency for Healthcare Research and Quality (AHRQ). Three states reported they collect DNR as a part of their discharge data reporting requirements.

AS A CORE DATA ELEMENT: PROS AND CONS

Justification for collection:

One state reports that this field is a value-added element supported by providers. The DNR field improves the ability to conduct outcome studies by serving as adjustment factor, as it considers patient preferences when evaluating in-hospital mortality.

Concerns:

Another state has dropped the DNR field, claiming that it was not being used by the provider community or for health services research or public health. This lack of use made it difficult for state officials to justify the provider cost to report this field.

RECOMMENDED STEPS TOWARD IMPLEMENTATION

NAHDO welcomes a discussion about the utility of this data element for public health and health services research.

Do Not Resuscitate

DATA ELEMENT:

Mothers Medical Record Number on the Newborn Record

RECOMMENDATION:

NAHDO recommends the inclusion of the Mothers Medical Record Number with the Newborns record as a priority for inclusion into the core data set.

Proposed for the X12N Implementation Guide:

Required: for newborn records: The medical record number of the newborn child's mother which links the newborn's hospital stay and the mother's stay.

Blank=Not Applicable

99999=no maternal admission to the hospital

CURRENT PRACTICE

Five states are known to collect the Mother's Medical Record Number on the newborn's record (HCUP Inventory, 1999). These states are more likely to routinely link their discharge databases with vital records data (birth and death certificates). Out of 33 respondents to the 1998 NAHDO Administrative Simplification survey of states, 18 states report that they link discharge data with other health data bases to track readmission rates and evaluate outcomes of interest. These states report that data collection can reduce the amount of data collected from providers and promote data integration with other health agencies.

Newborn records are less likely to contain a unique identifier (such as social security number or name), challenging the linkage between major health data sets (discharge data and vital records). This linkage enables the creation of measures that provide information about maternal and newborn outcomes of interest in populations at risk.

AS A CORE DATA ELEMENT: PROS AND CONS

Justification for standardizing the collection of Mothers Medical Record

Maternal and newborn health and health outcomes measurement is growing as an important state and federal issue. Accountability of federal and state funding of maternal programs is increasing. The Title V Block grant, administered by the Health Services Resource Administration (HRSA)/Maternal Child Health Bureau (MCHB) is a partnership between the federal government and states which provided nearly \$2.7 billion in fiscal year 1997 for services and programs at the State and local level in 59 jurisdictions. The MCHB requires states receiving Title V funding to report on core and elective performance measures that address specific maternal and child health needs that, when successfully addressed, can lead to a better health outcome within a specific time frame. These measures are reported nationally and are a part of the HRSA's Government Performance and Results Act (GPRA) reporting. Under GPRA funding decisions are linked with performance in a government-wide effort to establish measurable performance goals that can be reported as part of the budgetary process.

The integration of major health data bases and the ability to more effectively monitor health and health outcomes of populations-at-risk is a critical state issue, but also is a payer and provider issue in an era of growing accountability and privatization of health care delivery. Measuring and monitoring the health of a plan's population requires plans to adopt many of the epidemiologic tools and processes in practice in public health. The Healthplan Employer Data and Information

Set (HEDIS) is one example in which systematic and targeted integration of private/public and provider/vital records data may replace labor-intensive abstraction of data. Over ten states and many Medicaid HMO agencies require HEDIS reporting---which merges administrative and clinical data for specific populations.

Concerns:

In our research of states collecting this field, no major concerns were raised. Compliance to reporting of this field by providers was high and states that currently collect this data element with discharge data reported that little resistance from their provider community when this field was added.

RECOMMENDED STEPS TOWARD IMPLEMENTATION

Proceed with this request to add mother's medical record number to the X12N process.

OUTPATIENT ELEMENTS

DATA ELEMENT:

Data Type: Observation Stays

RECOMMENDATION:

NO RECOMMENDATION. THIS IS A STATE POLICY ISSUE IMPORTANT TO STATES.

Medicare's definition of observation services is:

“those services furnished on a hospital's premises which are reasonable and necessary to determine the need for possible admission to the hospital. These services include the use of a bed and periodic monitoring by a hospital's physician, nursing, and other staff”.

CURRENT PRACTICE

With the exception of one state (Massachusetts), statewide discharge data systems do not routinely or intentionally capture observation stays with inpatient, ambulatory surgical, or emergency department reporting.

PROS AND CONS

Justification for collection:

Patterns of inpatient and non-inpatient care are shifting and little is understood about the affect of limited stays on patient outcomes, access, or costs. One state has found that the cost-benefit of additional data collection to include observation stays may be justified:

A study of ambulatory sensitive conditions done in Massachusetts suggests that recent drops in inpatient preventable hospitalizations for certain diagnoses (e.g., asthma and gastroenteritis) may simply reflect a shift in the setting of care to observation/outpatient rather than better primary care delivery. Over one-third of observation stays were 24 hours or longer in length (though common belief was that observation stays were 23 hours or less). Community hospitals were found to consistently use observation stays at higher rates than teaching hospitals and this finding held across diagnoses, payer type, and severity of illness.

Concerns:

Little is known about the impact of observation stays on inpatient and outpatient utilization. Data collection methodologies may vary and the use of this type of stay may reflect more the payer policy than patient health status.

RECOMMENDED STEPS TOWARD IMPLEMENTATION

States vary in their ability to expand data collection to non-inpatient settings. As the experience of states currently collecting these stays increase, more states will consider expanded data collection. (Additional literature review, Medicare findings would help make the case for state collection).

Observation Stays

SUBJECT: Patient Consent HL7 Code in X12 Claim Data File

RECOMMENDATION:

We recommend that a patient consent/protection indicator be included in the core data set proposed by the Public Health Consortium as a situational data element. We further recommend to adopt this indicator in the HL7 coding standard:

Label of the Data Element (see HL7 2.3.1):

Protection indicator (PD1 3.3.9. 12, ID-1, Optional) 00744

Definition:

This field identifies whether access to information about this person should be kept from users who do not have adequate authority for the patient.

This field will be used by immunization registries to indicate whether or not consent has been given (or assumed) for record sharing.

Values:

- 1) Null - designated by " " (see section 2.6 of HL7 Version 2.3.1 for discussion of null value.), indicates that patient/guardian has not yet been asked to give consent to share or has not responded;
- 2) Y - sharing is allowed (patient has given consent or consent is implied)
- 3) N - sharing is not allowed (patient has refused consent).

CURRENT PRACTICE:

Immunization registries in several states have received billing/claim data to populate their registries. Since HIPAA requires patient consent for sharing medical records and the ANSI X12 837 standards do not include a patient consent field, patient consent has been handled manually in clinics and at the registries when immunization data are transferred through an EDI clearinghouse.

AS CORE DATA ELEMENT: PROS AND CONS:

Electronic recording and transferring patient consent will significantly reduce the burden (time and resource) for providers and public health personnel and assure the authorized release and sharing of confidential information. However, considerable resources are also needed to design this field and reprogram it into the current X12 EDI format.

RECOMMENDED STEPS TOWARDS IMPLEMENTATION:

1. To design the field and values according to the HIPAA's requirements and existent standards such as HL7. The patient consent field should be able to distinguish various situations beyond immunization, such as communicable disease, physical, and mental health information. Withdraw of a consent should be able to record with a date of the withdraw.
2. To educate health care providers, data suppliers, and EDI vendors on the HIPAA's requirements on patient consent to encourage them to collect and store the consents locally.
3. The development of the standard of the patient consent should be consistent with the coming revisions of the X12 and HL7 standards.
4. To collaborate with the X12 and HL7 national committees to integrate the consent information into their new releases.

APPENDIX

HIPAA DATA STANDARDS FOR STATEWIDE ENCOUNTER DATA SETS

DATA ELEMENTS TO BE EVALUATED: _____

COLLECTION:

How does your state currently define the above data element:

1. Year first reporting of these data elements were required with encounter data submission

2. Year these data elements were first received with encounter data submission

3. Compliance first year of submission (approximate percentage) _____
 - a. Current compliance _____
4. Main reasons given by data suppliers for non-compliance to this reporting requirement or request:

(legal, technical, cost, don't collect, etc.)
5. What was the main impetus behind the addition of these data elements in the submission requirements/specifications?
6. What were the reasons for supporting the acquisition of these data elements at the time?
7. Who resisted the requirement or request to obtain these data elements? (data suppliers/providers? Community advocates?)
8. What were the reasons given at the time?
9. How was the data reporting requirement communicated to data suppliers (check all that apply):
10. By statute _____ By administrative rule/regulation _____
11. If data element(s) are submitted on a voluntary basis, how was this communicated to data suppliers?

USE:

1. Who uses the data element(s) and how?
2. What initiatives do you have NOW that you would not have without these data elements?
3. Estimated number of people affected by the above initiatives?